

## WHAT IS CLAIMED IS:

1. A laser imager for recording an image on an image recording medium,  
comprising:

- 5           a) a laser light source emitting a first laser beam;
- b) a first optical system converting said first laser beam to a second laser beam;
- c) a Grating Light Valve™ which receives said second laser beam and  
generates a modulated third beam, said Grating Light Valve™ comprising reflecting  
members and a window a small distance away from said reflecting members; and
- 10           d) a second optical system comprising a focusing lens for focusing said third  
beam on said image recording medium, wherein
- said first optical system comprises:
- a bending element bending said first laser beam to convert said first beam to  
said second laser beam, and
- 15           the normal to the Grating Light Valve™ forms a nonzero angle  $\theta_{xz}$  with said  
second laser beam.

2. The laser imager according to claim 1, wherein

said first optical system further comprises:

20           a lens placed between said laser light source and said bending element.

3. The laser imager according to claim 2, wherein

said angle  $\theta_{xz}$  is at least  $4^\circ$  and not more than  $20^\circ$ .

25           4. The laser imager according to claim 3, wherein

said bending element comprises a total internal reflection prism.

5. A laser imager for recording an image on an image recording medium, comprising:

- 5           a) a laser light source emitting a first laser beam;
- b) a first optical system converting said first laser beam to a second laser beam;
- c) a Grating Light Valve™ which receives said second laser beam and generates a modulated third beam, said Grating Light Valve™ comprising reflecting members and a window a small distance away from said reflecting members; and
- 10           d) a second optical system for converting said third beam to a fourth light beam focused on said image recording medium, wherein
- said second optical system comprises:
- a bending element bending said third laser beam to convert said third beam to said fourth laser beam, and
- 15           the normal to the Grating Light Valve™ forms a nonzero angle  $\theta_{xz}$  with said second laser beam.

6. The laser imager according to claim 5, wherein

said angle  $\theta_{xz}$  is at least  $4^\circ$  and not more than  $20^\circ$ .

7. The laser imager according to claim 6, wherein

said bending element comprises a total internal reflection prism.

8. A laser imager for recording an image on an image recording medium,

25 comprising:

a) a laser light source emitting a laser beam; and

b) an optical system, changing an optical axis direction of said light beam for focusing said light beam on said image recording medium, comprising:

b-1) a reflection type spatial light modulator comprising a reflection part and a protective glass member arranged on said reflection part for receiving said light beam in a first direction and reflecting said light beam in a second direction inclined from said first direction to modulate said light beam, and

b-2) at least one optical element arranged in an optically serial order with said spatial light modulator for bending the optical axis direction of said light beam.

9. The laser imager according to claim 8, wherein said at least one optical element comprises a prism.

10. The laser imager according to claim 9, wherein said light beam reaches said spatial light modulator via said at least one optical element.

11. The laser imager according to claim 9, wherein said light beam is reflected by said spatial light modulator and thereafter incident upon said at least one optical element.